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APPLICATION NO.	FILING DATE	ING DATE FIRST NAMED INVENTOR		CONFIRMATION NO.	
09/244,961	02/04/1999	BRUCE BUTLER WRIGHT	NA-1147	4379	
75	590 12/18/2001				
OFFICE OF CHIEF COUNSEL ATTN: PATENT COUNSEL US ARMY SOLDIER SYSTEMS COMMAND			EXAMINER		
			ALEXANDER, LYLE		
KANSAS STRI NATICK, MA		ART UNIT	PAPER NUMBER		
in the contract of the contrac	017000000		1743	(0	
			DATE MAILED: 12/18/2001		

Please find below and/or attached an Office communication concerning this application or proceeding.

•					M=10				
pr-		Applicati n	No.	oplicant(s)	•				
Office Action Summary		09/244,961	w	RIGHT, BRUCE	BUTLER				
		Examiner	Ai	rt Unit					
		Lyle A Alexa		43					
Th MAILING DATE of this communication appears on the cover sheet with the correspondence address									
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM									
THE N - Exten after S - If the - If NO - Failur - Any re	MAILING DATE OF THIS COMMUNICA sions of time may be available under the provisions of 37 BIX (6) MONTHS from the mailing date of this communication of the provisions of 37 period for reply specified above, the maximum statutor is to reply within the set or extended period for reply within the set or extended period for reply will, apply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	TION. 7 CFR 1.136(a). In no event, ation. 1ys, a reply within the statutor, by eriod will apply and will en the statute cause the application.	however, may a reply be timely by minimum of thirty (30) days will kpire SIX (6) MONTHS from the light to become ABANDONED (3	filed  I be considered timel mailing date of this constant the constant of the	y. ommunication.				
1)⊠	Responsive to communication(s) filed	on <u>03 October 2001</u>	•						
2a) <u></u> □	This action is <b>FINAL</b> . 2b)	This action is no	on-final.						
3)□	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
4)🛛	Claim(s) 1 and 17 is/are pending in the	e application.							
4a) Of the above claim(s) is/are withdrawn from consideration.									
5) Claim(s) is/are allowed.									
6)⊠	6)⊠ Claim(s) <u>1 and 17</u> is/are rejected.								
7)	Claim(s) is/are objected to.								
8)□	Claim(s) are subject to restriction	n and/or election rec	uirement.						
Applicati	on Papers								
9) 🗌 -	The specification is objected to by the E	xaminer.							
10)	The drawing(s) filed on is/are: a)								
	Applicant may not request that any object								
11) The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.									
If approved, corrected drawings are required in reply to this Office action.									
12) 🗌	The oath or declaration is objected to by	the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120									
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a) ☐ All b) ☐ Some * c) ☐ None of:									
1. Certified copies of the priority documents have been received.									
2. Certified copies of the priority documents have been received in Application No									
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.									
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).									
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.									
Attachment(s)									
1)  Notic	e of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO mation Disclosure Statement(s) (PTO-1449) Pape	-948)	Interview Summary (F) Notice of Informal Pates) Other:						

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## Claim R j ctions - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taoukis et al. alone or further in view of Olsen et al.

Taoukis et al. teach time temperature indicators indistinguishable from those claimed. Taoukis et al. use of a computer to interpret the results of the indicator but does not use the claimed "plurality of comparator stages...".

The court decided In re Boesch (205 USPQ 215) that optimization of a result effective variable is ordinarily within the skill of the art. A result effective variable is one that has predictable and well known results.

It is notoriously well known in the art to use color comparison charts to interpret the results of a colorimetric indicator and/or to use a computer to also interpret colorimetirc results. It is notoriously well known to use either alone or in combination

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color charts and computers to achieve the expected well known expected results of colorimetric data interpretation. It would have been within the skill of the art to modify Taoukis et al. and include a colorimetric comparison chart to achieve the well known and expected interpretive results.

Olsen et al. teach in figure 10 a color comparison chart indistinguishable from that claimed. Color charts are advantageous because they are robust, inexpensive and can be used by the layperson. They also avert the need for an optical scanner which are expensive and relatively fragile in comparison.

It would have been within the skill of the art to modify Taoukis et al. in view of Olsen et al. and substitute the color comparison chart for the optical reader to gain the above advantages.

## Response to Arguments

Applicant's arguments filed 10/3/01 have been fully considered but they are not persuasive.

Applicants remarks and amendments have overcome most of the art of record.

Only Taoukis et al. and Olsen et al. continue as art rejections. The Office understands the invention as using convention time temperate indicators with the novelty directed to the use of the color comparison chart in combination with the means for storing data.

The position of record is first, it is known to use computers and color comparison charts to interpret colorimetric data and second, Olsen et al. teaches it is known to use color comparison charts for the reasons of record. Taoukis et al. teaches use of a computer for quantifying and storing resuts. It would have been obvious to modify

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Taoukis et al. and use any combination of computer and/or color charts to achieve the same result. Alternatively, in view of the teaching of Olsen et al. it would have been within the skill of the art to remove the optical reading device taught by Taoukis et al. and use a color comparison chart prior to entry in the computer to gain the advantages of record (e.g. optical readers being expensive and more fragile than a color chart).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lyle A Alexander whose telephone number is 703-308-3893. The examiner can normally be reached on Monday, Wednesday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 703-308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7718 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

December 14, 2001

LYLE A. ALEXANDER PRIMARY EXAMINER